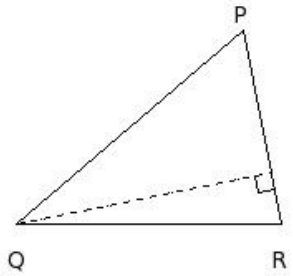
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Heron's Formula

Grade : CBSE Grade IX

1. In △PQR, if QR = 16 cm, RP = 12 cm, PQ = 18 cm, then corresponding height of side RP =

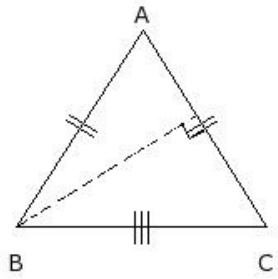


(i) 10.68 cm (ii) 15.68 cm (iii) 18.68 cm (iv) 12.68 cm (v) 20.68 cm

2. A triangular park has sides 170 m, 170 m and 200 m. A gardener has to put a fence all around it and also plant grass inside. Find the cost of fencing it with barbed wire at the rate of ₹37 per metre leaving a space of 5 m wide for the gate on one side.

(i) ₹19195.00 (ii) ₹19795.00 (iii) ₹18595.00 (iv) ₹22295.00 (v) ₹21495.00

3. In an isosceles triangle △ABC, if BC = 15 cm, AB = CA = 14 cm, then corresponding height of side CA =

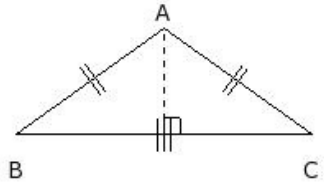


(i) 12.67 cm (ii) 9.67 cm (iii) 15.67 cm (iv) 17.67 cm (v) 7.67 cm

4. A triangle and a parallelogram, both have the same base and the same area. If the sides of the triangle are 15 cm, 11 cm and 11 cm, and the parallelogram stands on the base 11 cm, find the height of the parallelogram

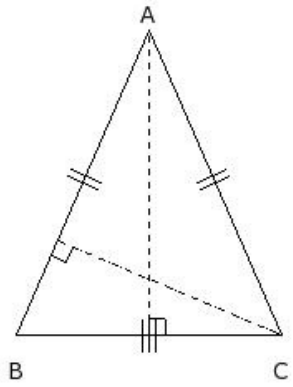
(i) 7.49 cm (ii) 5.49 cm (iii) 6.49 cm (iv) 3.49 cm (v) 4.49 cm

5. In an isosceles triangle △ABC, the corresponding height of the side BC is 6.32 cm and area is 56.92 sq.cm, then side BC =



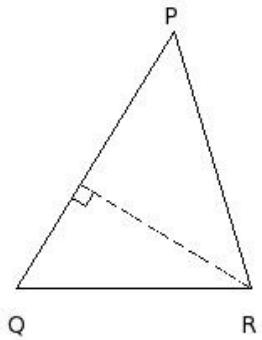
(i) 13.00 cm (ii) 15.00 cm (iii) 18.00 cm (iv) 21.00 cm (v) 23.00 cm

6. In an isosceles triangle △ABC, the corresponding height of the side BC is 18.33 cm and area is 146.64 sq.cm, then corresponding height of side AB =



(i) 14.66 cm (ii) 17.66 cm (iii) 19.66 cm (iv) 11.66 cm (v) 9.66 cm

7. In △PQR, if QR = 14 cm, RP = 16 cm, PQ = 18 cm, then corresponding height of side PQ =

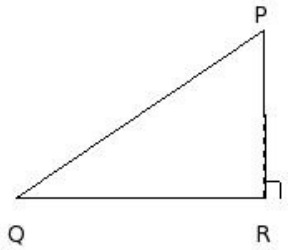


(i) 11.93 cm (ii) 8.93 cm (iii) 16.93 cm (iv) 6.93 cm (v) 14.93 cm

8. A traffic sign board is in the shape of an equilateral triangle . If its perimeter is 54 cm, what is its area ?

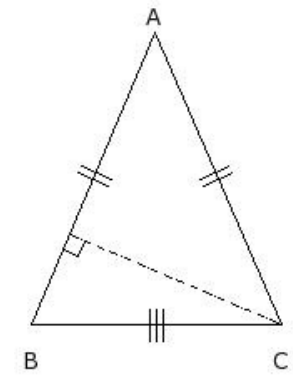
(i) 137.30 sq.cm (ii) 152.30 sq.cm (iii) 125.30 sq.cm (iv) 147.30 sq.cm (v) 140.30 sq.cm

9. In △PQR, if QR = 15 cm, RP = 10 cm and the corresponding height of side QR = 10 cm, then perimeter of the triangle =



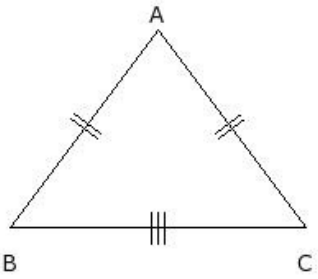
(i) 38.00 cm (ii) 46.00 cm (iii) 48.00 cm (iv) 40.00 cm (v) 43.00 cm

10. In an isosceles triangle △ABC, if BC = 15 cm, CA = AB and perimeter is 53 cm, then corresponding height of side AB =



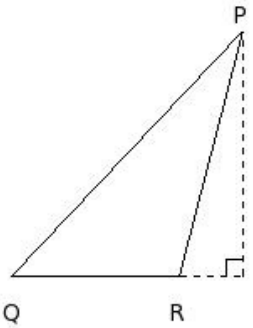
(i) 18.78 cm (ii) 13.78 cm (iii) 8.78 cm (iv) 16.78 cm (v) 10.78 cm

11. In an isosceles triangle △ABC, if BC = 18 cm, AB = CA = 15 cm, then area of the triangle =



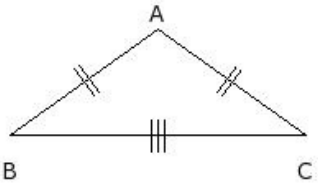
(i) 113.00 sq.cm (ii) 126.00 sq.cm (iii) 85.00 sq.cm (iv) 91.00 sq.cm (v) 108.00 sq.cm

12. In △PQR, if QR = 10 cm, RP = 15 cm and the corresponding height of side QR = 14.52 cm, then side PQ =



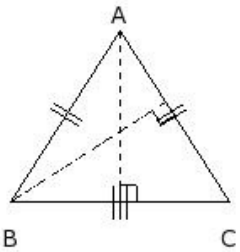
(i) 23.00 cm (ii) 20.00 cm (iii) 15.00 cm (iv) 17.00 cm (v) 25.00 cm

13. In an isosceles triangle △ABC, if base BC = 18 cm and area is 56.92 sq.cm, then side CA =



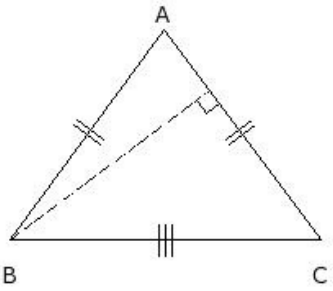
(i) 11.00 cm (ii) 16.00 cm (iii) 14.00 cm (iv) 6.00 cm (v) 8.00 cm

14. In an isosceles triangle △ABC, if base BC = 13 cm and the corresponding height is 10.09 cm, then corresponding height of side CA =



(i) 15.93 cm (ii) 5.93 cm (iii) 13.93 cm (iv) 7.93 cm (v) 10.93 cm

15. In an isosceles triangle △ABC, if base BC = 19 cm and area is 122.31 sq.cm, then corresponding height of side CA =

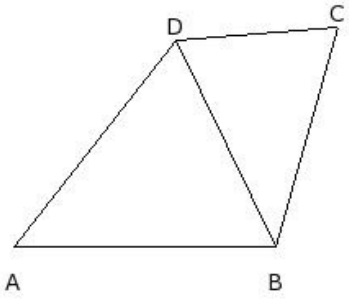


(i) 18.29 cm (ii) 10.29 cm (iii) 15.29 cm (iv) 12.29 cm (v) 20.29 cm

16. A rhombus shaped field has green grass for 7 cows to graze. If the perimeter of the field is 400.00 m and one of the diagonals is 150 m, how much area of the grass field will each cow be grazing?

(i) 1247.29 sq.m (ii) 1477.29 sq.m (iii) 1297.29 sq.m (iv) 1587.29 sq.m (v) 1417.29 sq.m

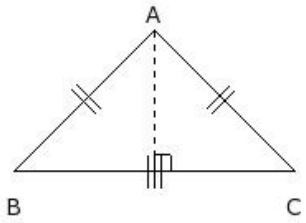
17. Some volunteers on a cleanliness drive decided to clean an open ground in the shape of a quadrilateral ABCD, where AB = 16.00 m, BC = 14.00 m, CD = 10.00 m, and DA = 16.00 m. They split into two groups m and n and started cleaning on either sides of the diagonal BD. Group m marked their perimeter which is of length 46 m. Which group cleaned more area ? Find the total area cleaned by both groups.



(i) group n , 181.11 sq.m (ii) group m , 173.11 sq.m (iii) group m , 166.11 sq.m (iv) group m , 153.11 sq.m

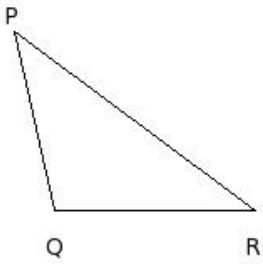
(v) group m , 158.11 sq.m

18. In an isosceles triangle △ABC, the corresponding height of the side BC is 8.47 cm and area is 72 sq.cm, then side CA =



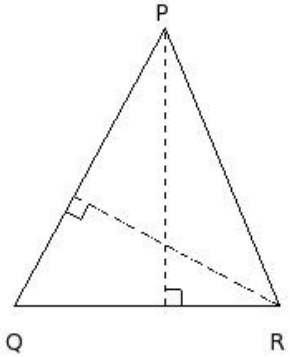
(i) 7.00 cm (ii) 9.00 cm (iii) 15.00 cm (iv) 12.00 cm (v) 17.00 cm

19. In △PQR, if QR = 12 cm, RP = 18 cm and perimeter = 41 cm, then area of the triangle =



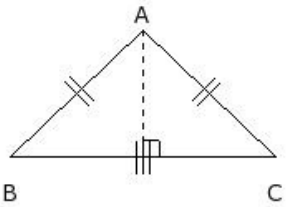
(i) 59.33 sq.cm (ii) 61.33 sq.cm (iii) 64.33 sq.cm (iv) 69.33 sq.cm (v) 67.33 sq.cm

20. In △PQR, if QR = 16 cm, RP = 18 cm and the corresponding height of side QR = 16.65 cm, then corresponding height of side PQ =



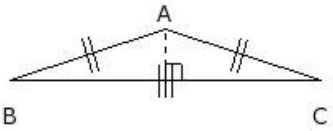
(i) 11.02 cm (ii) 19.02 cm (iii) 14.02 cm (iv) 17.02 cm (v) 9.02 cm

21. In an isosceles triangle △ABC, the corresponding height of the side BC is 7.55 cm and area is 60.4 sq.cm, then side AB =



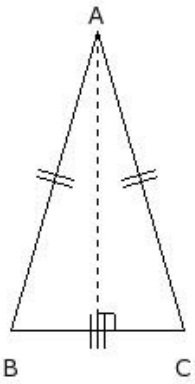
(i) 8.00 cm (ii) 11.00 cm (iii) 16.00 cm (iv) 6.00 cm (v) 14.00 cm

22. In an isosceles triangle △ABC, if base BC = 19 cm and the corresponding height is 3.12 cm, then area of the triangle =



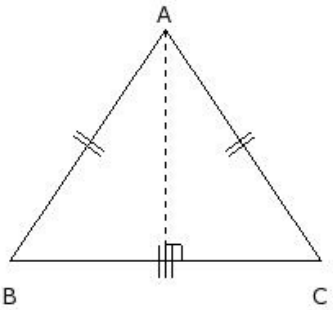
(i) 29.66 sq.cm (ii) 32.66 sq.cm (iii) 34.66 sq.cm (iv) 24.66 sq.cm (v) 26.66 sq.cm

23. In an isosceles triangle △ABC, if base BC = 10 cm and area is 86.46 sq.cm, then corresponding height of side BC =



(i) 12.29 cm (ii) 14.29 cm (iii) 20.29 cm (iv) 22.29 cm (v) 17.29 cm

24. In an isosceles triangle △ABC, if base BC = 19 cm and the corresponding height is 14.1 cm, then side AB =



(i) 12.00 cm (ii) 17.00 cm (iii) 20.00 cm (iv) 22.00 cm (v) 14.00 cm

25. A triangular park has sides 100 m, 140 m and 100 m. A gardener has to put a fence all around it and also plant grass inside. How much area does he need to plant ?

(i) 5279.00 sq.m (ii) 4839.00 sq.m (iii) 5049.00 sq.m (iv) 4999.00 sq.m

Assignment Key

1) (ii)	2) (ii)	3) (i)	4) (ii)	5) (iii)	6) (i)
7) (i)	8) (v)	9) (v)	10) (ii)	11) (v)	12) (ii)
13) (i)	14) (v)	15) (iii)	16) (v)	17) (iii)	18) (iv)
19) (iii)	20) (iii)	21) (ii)	22) (i)	23) (v)	24) (ii)
25) (iv)					